

**Support for the new claims:**

The new claims are supported, for example, on page 20 lines 7-12, and thus they do not constitute new matter.

**Rejection under 35 USC 112 second paragraph**

The patent office rejected claim 17 as being indefinite. Specifically, the patent office referred to the phrase “laminin 10 according to a method.” However, this phrase does not appear in claim 17, which instead included the phrase “laminin 10 isolated according to a method comprising...” Thus, the Applicants traverse this rejection. Nonetheless, in order to expedite prosecution, the Applicants have amended the claim according to the patent office’s suggestion. The Applicants note that this amendment in no way limits the scope of the claim. Thus, the Applicants respectfully request reconsideration and withdrawal of the rejection.

**Rejection under 35 USC 102**

The patent office rejected claims 6-10, 17, and 24 under 35 USC 102(b) based on the assertion that the Miner reference teaches isolated mouse laminin heterotrimers. The Applicants traverse this rejection.

The Miner reference provides a non-reducing polyacrylamide gel in which various laminins are identified by antibody binding to partially purified crude membrane preparations. As defined in the specification of the present application, the term ‘isolated’ means that the laminin 10 is substantially free of other proteins, including the laminin  $\beta$ 2 polypeptide chain and gel agents such as polyacrylamide and agarose. (Page 17 lines 8-11) The Miner reference does not teach laminin 10 that is substantially free of gel agents such as polyacrylamide.

Furthermore, the legend for Figure 10B states the following:

“Identification of laminin trimers from adult lung. Laminins were solubilized, partially purified, and then immunoprecipitated with antibodies to laminin  $\beta$ 1 (lanes 1-5),  $\beta$ 2 (lanes 6-10),  $\gamma$ 1 (lanes 11-13), or without primary antibody (lanes 14-18). The precipitates were then fractionated on non-reducing gels and probed without primary antibody (lanes 1, 6, 11, and 14), or with antibodies to laminins  $\beta$ 2 (lanes 2, 7, and 15),  $\alpha$ 4 (lanes 3, 8, 12, and 16),  $\alpha$ 5 (lanes 4, 9, 13, and 17), and  $\gamma$ 1 (lanes 5, 10, and 18).”

As noted in the specification of the pending application, attempts to purify laminin 10 from cell sources by affinity chromatography using laminin chain antibodies have been unsuccessful in eliminating, for example, laminin  $\beta$ 2 chain, which is a component of laminin 11 (see, for example, Sixt et al., J. Biol. Chem. 276 (22) 18878-87 (2001)). Thus, such preparations represent a mixture of laminin 10 and laminin 11." (Page 6 lines 15-20)

Figure 10B in Miner shows laminin 10 as being present in lanes 5 and 13. In lane 13, it is shown to co-migrate with at least laminin 11, and thus the laminin 10 in that gel is not substantially free of other proteins.

The laminin 10 in lane 5 was derived from an immunoprecipitation of laminins using laminin  $\beta$ 1, which is found in at least laminins 1, 2, 6, 8, 10, and 12 (see page 3 lines 6-9 of the pending specification). A  $\gamma$ 1 probe was used to identify laminins 8 and 10 in lane 5. However, it should be noted that such a probe would not have identified laminin 12, which has a  $\gamma$ 3 chain. Furthermore, no controls were performed to verify that laminins 2, 6, 11 or 12 were not present in this sample. Finally, as discussed above, attempts to purify laminin 10 from cell sources by affinity chromatography using laminin chain antibodies have been unsuccessful in eliminating, for example, laminin  $\beta$ 2 chain, which is a component of laminin 11. Thus, the laminin 10 present in lane 5 as shown in Figure 10B cannot be said to be substantially free of other protein, nor does Miner make any such assertion.


Thus, the Applicant respectfully requests reconsideration and withdrawal of this rejection.

Based on the above, the Applicants believe that the application is in condition for allowance. If the Examiner believes that an interview would accelerate prosecution of the Application, she is invited to contact the below-signed attorney.

**Respectfully submitted,**

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